

WR 114  
Dept. of Environmental Quality

RECEIVED

NORTHWEST REGION

PRELIMINARY REPORT

Initial Water, Debris and Soil Sampling  
for Chlorophenols in the Vicinity of  
Avison Lumber Mills, Molalla, Oregon  
March 28, 29, 1983.

Prepared for Avison Lumber Company  
for transmittal to Oregon Department  
of Environmental Quality by Beak  
Consultants, Incorporated, Portland,  
Oregon

D2938

April 14, 1983

USEPA SF



1495137

## INTRODUCTION

Sampling of water, soil and debris was done March 28 and 29, 1982 as proposed in the March 18, 1983 Scope of Work approved by the Oregon Department of Environmental Quality.

## METHODS

Analyses of the samples for three isomers of tetrachlorophenol and for pentachlorophenol were performed according to USEPA method 604 (FR 44:679484-69488, 1979) and publication EPA 600/4-81-055.

Glass sample containers were prepared through cleaning and solvent rinsing to prevent sample contamination.

Precautions were taken to prevent cross-contamination of samples in the 1 m deep pit soil samples. Sampling equipment was triple-rinsed with tap and distilled water and with solvent prior to obtaining each sample.

Samples were placed in ice chests following collection and transported to the laboratory where samples were held in refrigerated storage (0-5 C) until analyzed within several days of collection.

Samples of soil comprised gravel, soil and wood particles. Prior to analysis, larger gravel and wood particles were removed.

## RESULTS

Water Samples: Of the four chlorophenols, pentachlorophenol (PCP) and 2,3,4,6-tetrachlorophenol (TCP) were the primary compounds detected in the samples. Water in the ditch flowing from under the treated lumber storage area (see sampling locations W4, W5, and W6 on Figure 1) had four times the concentrations of TCP and PCP than in Bear Creek (locations W2 and W3) (Table 1). The small drainage ditch (W1) from the area in the vicinity of the dip tank at A1 had the highest concentrations of both TCP and PCP. Discharge at the time of sampling was estimated to be 20 cfs in Bear Creek, 1 cfs in the ditch north of the lumber storage yard (W4) and less than 1 cfs in the ditch (W1) near the dip tank at A1.

Sediment Samples: Levels of TCP and PCP in sediment from the drainage ditch (E3) were higher than in those from Bear Creek sediment (E1 and E2) (Table 2). This observation parallels the higher concentrations of TCP and PCP observed in drainage ditch water as compared with Bear Creek water. The drainage ditch sediment also contained measurable levels of the other two TCP isomers (2,3,4,5-TCP and 2,3,5,6-TCP) (Table 2).

Table 1. Concentration of tetrachlorophenols and pentachlorophenol in water samples (see photo Figure 1 for sample location).

Sample Number	Sample Location	Concentration ( $\mu\text{g/kg}$ dry sample weight)*			
		2,3,4,5-TCP	2,3,4,6-TCP	2,3,5,6-TCP	Pentachlorophenol
825B	W1	3.8	1,130	ND	758
826B	W2	ND	92	ND	29
827B	W3	ND	92	ND	24
828B	W4	ND	437	ND	121
829B	W5	16	544	ND	133
830B	W6	4.8	642	ND	122

\*Detection limit, 1.0  $\mu\text{g/liter}$ .

R E P O R T S . B Y

B E A K   C O S U L T A N T S   I N C



BEAK CONSULTANTS INCORPORATED  
Corporate Headquarters

Eighth Floor Loyalty Bldg.  
317 S.W. Alder  
Portland, Oregon 97204  
Telephone 503/248-9507

Dept of Environmental Quality

R E C E I V E D

APR 4 1985

BEAK

NORTHWEST REGION

April 2, 1985

Mr. James A. Broad  
Department of Environmental Quality  
522 South West Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

Sampling continued during February, 1985 to monitor chlorophenol concentrations in Bear Creek near the Avison mill in Molalla, Oregon. Two samples were collected for analysis on February 28, 1985 at stations SW1 and SW2. No unusual conditions were noted. Intermittent showers occurred during the two weeks prior to sampling. Temperatures have been warming in general, however, nighttime temperatures were still close to or below freezing for the most part. Water conditions in Bear Creek were slightly turbid indicating some possible snow melt activity.

Detection limits for the two chlorophenol compounds were 0.20 µg/l at both stations. Concentrations for both 2, 3, 4, 6--Tetrachlorophenol and Penta-chlorophenol were extremely low for both stations. Tetrachlorophenol was not detected at station SW2 (Table 1). This indicates an average 92% reduction over concentrations observed during January.

Please note a revision in Table 1. Bear Creek discharge for January 25 1985 was listed as 6.0 mgd in the last monthly report. As you will notice, it has been revised to 3.0 mgd in the enclosed table. Hopefully, this has not caused any confusion.

Samples will be collected again during the last week in March. Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,

Donald R. Anglin

Donald R. Anglin  
Fish & Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA/ccm  
cc: Bill Avison  
Gordon Haver

*Avison will expand their monthly monitoring to include sample from Bear Creek at the point at which it becomes a Class I stream. If monitoring indicates chlorophenol concentration at that point is excess of 0.1 µg/l or PCP, then additional strategies will be required.*

Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Molalla, Oregon.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
12/14/83			
SW1	0.01130	0.00494	18.0
SW2	0.01730	0.00473	
1/16/84			
SW1	0.00530	0.00276	5.5
SW2	0.00306	0.00162	
2/15/84			
SW1	0.00297	0.00133	14.0
SW2	0.00220	0.00103	
3/13/84			
SW1	0.02980	0.00733	7.5
SW2	0.04720	0.01210	
4/17/84			
SW1	0.00152	0.00106	6.75
SW2	0.00096	0.00074	
5/15/84			
SW1	0.00485	0.00402	9.5
SW2	0.00240	0.00275	
6/19/84			
SW1	0.00076	0.00093	2.0
SW2	0.00053	0.00065	
8/2/84			
SW1	0.00190	0.00315	2.0
SW2	ND	ND	
8/29/84			
SW1	0.00130	0.00220	0.5
SW2	ND	ND	
9/24/84			
SW1	*	*	0.0
SW2	*	*	

ND - Not Detected

\* - No Sample

Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Molalla, Oregon. Continued.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
10/26/84			
SW1	0.00963	0.00363	2.0
SW2	0.00581	0.00415	
SW5	ND	ND	
11/30/84			
SW1	0.00042	0.00024	20.0
SW2	0.00524	0.00093	
1/2/85			
SW1	0.00055	0.00084	12.5
SW2	0.00027	0.00048	
1/25/85			
SW1	0.00955	0.00484	3.0
SW2	0.01380	0.00548	
2/28/85			
SW1	0.000406	0.000788	3.1
SW2	ND	0.000682	

ND - Not Detected

\* - No Sample



BEAK CONSULTANTS INCORPORATED  
Corporate Headquarters

Eighth Floor Loyally Bldg.  
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Portland, Oregon 97204  
Telephone 503/248-9507

Dept. of Environmental Quality

RECEIVED

FEB 15 1985

February 12, 1985

NORTHWEST REGION

JAB

Mr. James A. Broad  
Department of Environmental Quality  
522 Southwest Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

Sampling continued during January, 1985 to monitor chlorophenol concentrations in Bear Creek near the Avison mill in Molalla, Oregon. Two samples were collected for analysis on January 25, 1985, at stations SW1 and SW2. No unusual conditions were noted. Temperatures around the Bear Creek watershed have consistently been below freezing for several weeks. Freezing temperatures along with the lack of significant rainfall have produced low flow conditions (<10 cfs) and shore ice along both banks. Flow conditions were similar to those observed during January, 1984.

Detection limits for the two chlorophenol compounds were 0.20 µg/l at both stations. Concentrations for both 2,3,4,6-Tetrachlorophenol and Pentachlorophenol were relatively high for this month's samples (Table 1). I can offer no apparent reason for the increase in the concentration of the two compounds, especially in light of the low temperatures and low flow conditions.

Samples will be collected again during the last week in February. Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,

*Donald R. Anglin*

Donald R. Anglin  
Fish & Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA:KH

cc: Bill Avison  
Gordon Haver



Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Molalla, Oregon.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
12/14/83			
SW1	0.01130	0.00494	18.0
SW2	0.01730	0.00473	
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SW1	0.00530	0.00276	5.5
SW2	0.00306	0.00162	
2/15/84			
SW1	0.00297	0.00133	14.0
SW2	0.00220	0.00103	
3/13/84			
SW1	0.02980	0.00733	7.5
SW2	0.04720	0.01210	
4/17/84			
SW1	0.00152	0.00106	6.75
SW2	0.00096	0.00074	
5/15/84			
SW1	0.00485	0.00402	9.5
SW2	0.00240	0.00275	
6/19/84			
SW1	0.00076	0.00093	2.0
SW2	0.00053	0.00065	
8/2/84			
SW1	0.00190	0.00315	2.0
SW2	ND	ND	
8/29/84			
SW1	0.00130	0.00220	0.5
SW2	ND	ND	
9/24/84			
SW1	*	*	0.0
SW2	*	*	

ND - Not Detected

\* - No Sample

Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Molalla, Oregon. Continued.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
10/26/84			
SW1	0.00963	0.00363	2.0
SW2	0.00581	0.00415	
SW5	ND	ND	
11/30/84			
SW1	0.00042	0.00024	20.0
SW2	0.00524	0.00093	
1/2/85			
SW1	0.00055	0.00084	12.5
SW2	0.00027	0.00048	
1/25/85			
SW1	0.00955	0.00484	6.0
SW2	0.01380	0.00548	

ND - Not Detected

\* - No Sample

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Dept. of Environmental Quality

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JAN 23 1985

January 22, 1985

NORTHWEST REGION

Mr. James A. Broad  
Department of Environmental Quality  
522 Southwest Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

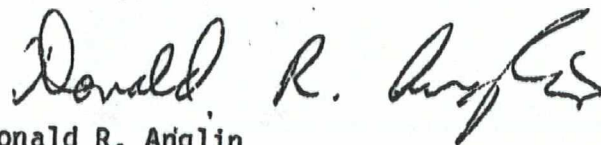
Dear Mr. Broad:

Sampling continued during December, 1984 and January, 1985 to monitor chlorophenol concentrations in Bear Creek near the Avison mill in Molalla, Oregon. Two December samples were collected for analysis on January 2, 1985, at stations SW1 and SW2. No unusual conditions were noted. The week prior to sampling was characterized by sub-freezing temperatures throughout the Bear Creek watershed. This contributed to the reduced discharge (about 18 cfs) observed on this sampling date as compared to the discharge (about 30 cfs) noted in November.

Detection limits for the two chlorophenol compounds were 0.20 µg/l for both stations. Concentrations for both 2,3,4,6-Tetrachlorophenol and Pentachlorophenol were extremely low at both stations SW1 and SW2 (Table 1). There was a marked reduction in the concentrations of both compounds at station SW2 as compared to November samples. Concentrations were slightly higher at station SW1 but still well below the target value of 0.0032 mg/l. A comparison of this month's sample analysis to figures for December, 1983, shows a substantial improvement in chlorophenol concentrations for both stations.

Sample collection for the present month is scheduled for January 25, 1985. Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,



Donald R. Anglin  
Fish & Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA:KH

cc: Bill Avison  
Gordon Haver



Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Mollalla, Oregon.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
12/14/83			
SW1	0.01130	0.00494	18.0
SW2	0.01730	0.00473	
1/16/84			
SW1	0.00530	0.00276	5.5
SW2	0.00306	0.00162	
2/15/84			
SW1	0.00297	0.00133	14.0
SW2	0.00220	0.00103	
3/13/84			
SW1	0.02980	0.00733	7.5
SW2	0.04720	0.01210	
4/17/84			
SW1	0.00152	0.00106	6.75
SW2	0.00096	0.00074	
5/15/84			
SW1	0.00485	0.00402	9.5
SW2	0.00240	0.00275	
6/19/84			
SW1	0.00076	0.00093	2.0
SW2	0.00053	0.00065	
8/2/84			
SW1	0.00190	0.00315	2.0
SW2	ND	ND	
8/29/84			
SW1	0.00130	0.00220	0.5
SW2	ND	ND	
9/24/84			
SW1	*	*	0.0
SW2	*	*	

ND - Not Detected

\* - No Sample



Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Mollalla, Oregon. Continued.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
10/26/84			
SW1	0.00963	0.00363	2.0
SW2	0.00581	0.00415	
SW5	ND	ND	
11/30/84			
SW1	0.00042	0.00024	20.0
SW2	0.00524	0.00093	
1/2/85			
SW1	0.00055	0.00084	12.5
SW2	0.00027	0.00048	

ND - Not Detected

\* - No Sample

BEAK CONSULTANTS INCORPORATED  
Corporate Headquarters

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Telephone 503/248-9507

Dept. of Environmental Quality



January 4, 1985

NORTHWEST REGION

*SAB*

Mr. James A. Broad  
Department of Environmental Quality  
522 Southwest Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

Sampling continued during November, 1984 to monitor chlorophenol concentrations in Bear Creek near the Avison mill in Molalla, Oregon. Two samples were collected for analysis on November 30, 1984, at stations SW1 and SW2. No unusual conditions were noted. Showers and rain occurred frequently for the previous two weeks. Stream discharge had increased significantly (about 30 cfs) since the October samples were collected.

Detection limits for the two chlorophenol compounds were 0.02 µg/l for both stations SW1 and SW2. Concentrations for both 2,3,4,6-Tetrachlorophenol and Pentachlorophenol were extremely low with the exception of 2,3,4,6 - TCP at station SW2. There was essentially no change in the concentration of 2,3,4,6 - TCP at station SW2 between October and November. All other analyses showed a small decline over October values.

Due to the holiday season and schedule conflicts, the December samples were collected January 2, 1985. Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,

Donald R. Anglin  
Fish & Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA:KH

cc: Bill Avison  
Gordon Haver

Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Mollalla, Oregon.

Date	2, 3, 4, 6 Tetrachlorophenol (mg/l)	Pentachlorophenol (mg/l)	Bear Creek Discharge (mgd)
12/14/83			18.0
SW1	0.01130	0.00494	
SW2	0.01730	0.00473	
1/16/84			5.5
SW1	0.00530	0.00276	
SW2	0.00306	0.00162	
2/15/84			14.0
SW1	0.00297	0.00133	
SW2	0.00220	0.00103	
3/13/84			7.5
SW1	0.02980	0.00733	
SW2	0.04720	0.01210	
4/17/84			6.75
SW1	0.00152	0.00106	
SW2	0.00096	0.00074	
5/15/84			9.5
SW1	0.00485	0.00402	
SW2	0.00240	0.00275	
6/19/84			2.0
SW1	0.00076	0.00093	
SW2	0.00053	0.00065	
8/2/84			2.0
SW1	0.00190	0.00315	
SW2	ND	ND	
8/29/84			0.5
SW1	0.00130	0.00220	
SW2	ND	ND	
9/24/84			0.0
SW1	*	*	
SW2	*	*	
10/26/84			2.0
SW1	0.00963	0.00363	
SW2	0.00581	0.00415	
SW5	ND	ND	
11/30/84			20.0
SW1	0.00042	0.00024	
SW2	0.00524	0.00093	

ND - Not Detected  
\* - No Sample



**BEAK CONSULTANTS INCORPORATED**

Corporate Headquarters

Eighth Floor Loyalty Bldg.

317 S.W. Alder

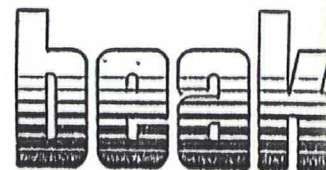
Portland, Oregon 97204

Telephone 503/248-9507

Dept. of Environmental Quality



NORTHWEST REGION



December 3, 1984

*JAG*  
*JAB*

Mr. James A. Broad  
Department of Environmental Quality  
522 South West Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

Re: Beak Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

I would like to clarify and correct an error which appeared in the October monthly report for the chlorophenol monitoring program at Avison Lumber Company's Molalla, Oregon mill. I reported detection limits for sample analysis as 0.20 g/l and 3.0 g/l for October samples. The units listed should have read "µg/l" in both cases. I am sorry for the error and any problems it may have caused. I have enclosed a new copy of the report with the corrections included. I would appreciate it if you would replace the original copy with the enclosed, revised copy. Thanks.

Sincerely,

Donald R. Anglin  
Fish & Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA:jm

Enclosure

cc: Bill Avison  
Gordon Haver

*done*  
*B/*





## STATE OF OREGON

INTEROFFICE MEMO *revised*TO: LDPatterson thru JAG *JAG*

DATE: 3 December 1984

FROM: JABroad *JAB*SUBJECT: WQ - Avison Lumber Co. - Clackamas County  
PCP Concentrations

PCP concentrations exceeded the .0032 ppm target level in Bear Creek below Avison's sawmill on October 26, 1984. Both PCP and TCP exceeded .0032 with TCP the most prominent. This is the first exceedence since May 15, 1984.

The October sample was taken following several days of heavy rain. The exact cause of the exceedence has yet to be determined, but I expect it may be from rain falling on dried treated lumber. If the exceedences continue or recur I will ask Avison to submit a plan for corrective action.

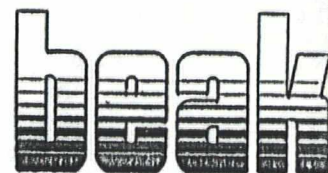
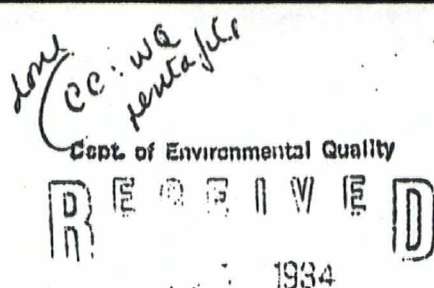
JAB/mb

*Revised pda #3*

BEAK CONSULTANTS INCORPORATED  
Corporate Headquarters

Eighth Floor Loyalty Bldg.  
317 S.W. Alder  
Portland, Oregon 97204

Telephone 503/248-9507



November 28, 1984

Mr. James A. Broad  
Department of Environmental Quality  
522 South West Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

NORTHWEST REGION

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

Sampling was continued during October, 1984, along with the resumption of flow in Bear Creek, to monitor chlorophenol concentrations near the Avison mill in Molalla, Oregon. Two samples were collected for analysis on October 26, 1984, at stations SW1 and SW2. In addition, a third sample was collected at station SW5 which is located along the ditch that runs along the north edge of the Avison operation and eventually into Bear Creek. No unusual conditions were noted. The week prior to sampling was characterized by continuous, occasionally heavy rain.

Detection limits for the two chlorophenol compounds were 0.20 µg/l for the October sample analysis for stations SW1 and SW2. Concentrations of both 2, 3, 4, 6-Tetrachlorophenol and Pentachlorophenol were higher at both stations as compared to August values. This was undoubtedly a side effect of the increase in precipitation. At the present time, we are trying to identify any remaining factors which, when coupled with an increase in precipitation, might cause the observed elevations of the phenol concentrations in Bear Creek.

Detection limits for station SW5 sample analysis were 3.0 µg/l due to the turbidity of the sample and the resulting background contaminants. Neither phenol compound was detected at this location.

The next sample collection is scheduled for November 29, 1984. Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,

Donald R. Anglin  
Fish & Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA/ccm  
cc: Bill Avison  
Gordon Haver

Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Mollalla, Oregon.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
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SW2	0.00053	0.00065	
8/2/84			
SW1	0.00190	0.00315	2.0
SW2	ND	ND	
8/29/84			
SW1	0.00130	0.00220	0.5
SW2	ND	ND	
9/24/84			
SW1	*	*	0.0
SW2	*	*	
10/26/84			
SW1	0.00963	0.00363	2.0
SW2	0.00581	0.00415	may be greater than 2.0
SW5	ND	ND	

ND - Not Detected

\* - No Sample



BEAK CONSULTANTS INCORPORATED

Corporate Headquarters

Eighth Floor Loyalty Bldg.

317 S.W. Alder

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Telephone 503/248-9507

Dept. of Environmental Quality

RECEIVED

OCT 7 1984

NORTHWEST REGION

beak

September 29, 1984

Mr. James A. Broad  
Department of Environmental Quality  
522 South West Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

*wa creek co  
PCP*

Dear Mr. Broad:

Sampling was attempted on 24 September, 1984, to monitor chlorophyll concentration in Bear Creek near the Avison mill in Molalla, Oregon. Zero flow conditions were encountered in the creek with some portions of the channel being completely dry and other portions containing only ponded, residual water.

Due to the absence of flow in Bear Creek, no samples were collected for September. Sampling will resume in October based on anticipated positive flow conditions. Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,

*Donald R. Anglin*

Donald R. Anglin  
Fish and Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA/ccm

cc: Bill Avison  
Gordon Haver



Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Mollalla, Oregon.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
12/14/83			
SW1	0.01130	0.00494	18.0
SW2	<u>0.01730</u>	0.00473	
1/16/84			
SW1	0.00530	0.00276	5.5
SW2	0.00306	0.00162	
2/15/84			
SW1	0.00297	0.00133	14.0
SW2	0.00220	0.00103	
3/13/84			
SW1	0.02980	0.00733	7.5
SW2	<u>0.04720</u>	0.01210	
4/17/84			
SW1	0.00152	0.00106	6.75
SW2	0.00096	0.00074	
5/15/84			
SW1	0.00485	0.00402	9.5
SW2	0.00240	0.00275	
6/19/84			
SW1	0.00076	0.00093	2.0
SW2	0.00053	0.00065	
8/2/84			
SW1	0.00190	0.00315	2.0
SW2	ND	ND	
8/29/84			
SW1	0.00130	0.00220	0.5
SW2	ND	ND	
9/24/84			
SW1	*	*	0.0
SW2	*	*	

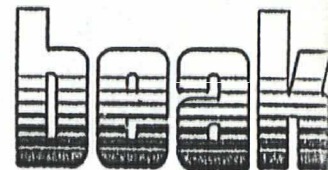
ND - Not Detected

\* - No Sample

**BEAK CONSULTANTS INCORPORATED**  
Corporate Headquarters

Eighth Floor Loyalty Bldg.  
317 S.W. Alder  
Portland, Oregon 97204  
Telephone 503/248-9507

Dept. of Environmental Quality  
**RECEIVED**  
SEP 17 1984



JAB

**NORTHWEST REGION**

September 14, 1984

Mr. James A. Broad  
Department of Environmental Quality  
522 South West Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

Sampling continued during August, 1984 to monitor chlorophenol concentrations in Bear Creek near the Avison mill in Molalla, Oregon. Two samples were collected for analysis on August 29, 1984 at stations SW1 and SW2. No unusual conditions were noted. Warm, dry weather continued during August resulting in near zero discharge conditions (<1.0 cfs).

Detection limits for the two chlorophenol compounds were refined to 0.20 µg/l for the August sample analysis. Concentrations for both 2, 3, 4, 6 - Tetrachlorophenol and Pentachlorophenol were low at station SW1 and below detection limits at station SW2 (Table 1).

Should zero flow discharge conditions be encountered during September, no September sample will be collected and sampling will resume in October. Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,

Donald R. Anglin  
Fish and Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA/ccm  
cc: Bill Avison  
Gordon Haver

**BEAK CONSULTANTS INCORPORATED**  
Corporate Headquarters

Eighth Floor Loyalty Bldg.  
317 S.W. Alder  
Portland, Oregon 97204  
Telephone 503/248-9507

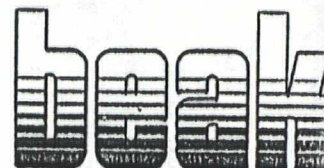
Dept. of Environmental Quality

**R E C E I V E D**

APR 11 1984

NORTHWEST REGION

cc 7 WQ



April 5, 1984

*LAB*  
*RH*

Mr. James A. Broad  
Department of Environmental Quality  
522 South West Fifth Avenue  
Post Office Box 1760  
Portland, OR 97204

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

Sampling continued during March, 1984 to monitor chlorophenol concentrations in Bear Creek near the Avison mill in Molalla, Oregon. Two samples were collected for analysis on March 13, 1984 at stations SW1 and SW2. No unusual conditions were noted. Discharge conditions in Bear Creek were low (7.5 mgd, 11.6 cfs), however the discharge was on a steadily increasing trend due to weather system activity during this time period.

An increase in both 2, 3, 4, 6-- Tetrachlorophenol and Pentachlorophenol was noted for the March samples. This is the first increase in the concentrations of these compounds since monitoring started in December, 1983. Samples will be collected for analysis again on April 16 or 17, 1984.

Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,

Donald R. Anglin  
Fish and Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA:cw

cc: Bill Avison  
Gordon Haver



Table 1. Chlorophenol analysis results by date for station SW1 and SW2 on Bear Creek near the Avison mill in Mollalla, Oregon.

<u>Date</u>	<u>2, 3, 4, 6 Tetrachlorophenol (mg/l)</u>	<u>Pentachlorophenol (mg/l)</u>	<u>Bear Creek Discharge (mgd)</u>
12/14/83			18.0
SW1	0.01130	0.00494	
SW2	0.01730	0.00473	
1/16/84			5.5
SW1	0.00530	0.00276	
SW2	0.00306	0.00162	
2/15/84			14.0
SW1	0.00297	0.00133	
SW2	0.00220	0.00103	
3/13/84			7.5
SW1	0.02980	0.00733	
SW2	* 0.04720	0.01210	

Note: Down stream sample has higher chlorophenols than upstream sample. Results still exceed the maximum desirable level of 0.003 mg/l. The ratio for TCP to PCP indicates contamination probably a result of drainage from treated lumber as opposed to past sloppy practices.

GA3

BEAK CONSULTANTS INCORPORATED

Corporate Headquarters

Eighth Floor Loyalty Bldg.

317 S.W. Alder

Portland, Oregon 97204

Telephone 503/248-9507

Dept. of Environmental Quality

RECEIVED

MAR 16 1984

done  
cc: W

beak

February 29, 1984

NORTHWEST REGION

Mr. James A. Broad  
Department of Environmental Quality  
522 South West Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

JAB  
BUTCH  
LBS

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

Sampling continued during February, 1984 to monitor chlorophenol concentrations in Bear Creek near the Avison mill in Molalla, Oregon. Two samples were collected for analysis on February 15, 1984 at stations SW1 and SW2. Heavy equipment working in the stream during my sampling activities resulted in highly turbid conditions at station SW2 with a small amount of sediment subsequently settling out in the bottom of the sample bottle. Discharge conditions in Bear Creek were average (14.0 mgd, 21.7 cfs).

A marked decrease in the concentrations of both 2,3,4,6-Tetrachlorophenol and Pentachlorophenol was again noted for the February samples. Station SW1 realized an average 48% decrease in both chlorophenol compounds and station SW2 values decreased by an average 32%. These values are considerably lower than December, 1983, values which were obtained under similar discharge conditions. They were also lower than January values which were obtained under low flow conditions. There appeared to be very little, if any, chlorophenol input from stream sediments which were present in the sample from station SW2.

The trend in chlorophenol concentrations in Bear Creek over the last three months has been steadily decreasing, with February concentrations well below the prescribed 0.0032 mg/l limit. Following the March, 1984, evaluation of chlorophenols in Bear Creek, I would like to schedule a meeting to discuss the status of this monitoring program. I will contact you after the March sample results have been reported.

Should you have any questions or comments, please give me a call at 48-9507.

Sincerely,

Donald R. Anglin  
Fish and Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA/kh  
cc: Bill Avison

Table 1. Chlorophenol analysis results by date for stations SW1 and SW2 on Bear Creek near the Avison mill in Molalla, Oregon.

Date	2,3,4,6 Tetrachlorophenol (mg/l)	Pentachlorophenol (mg/l)	Bear Creek Discharge (mgd)
12/14/83			
SW1	0.01130	0.00494	18.0
SW2	0.01730	0.00473	
1/16/84			
SW1	0.00530	0.00276	5.5
SW2	0.00306	0.00162	
2/15/84			
SW1	0.00297	0.00133	14.0
SW2	0.00220	0.00103	



BEAK CONSULTANTS INCORPORATED  
Corporate Headquarters

Eighth Floor Loyalty Bldg.  
317 S.W. Alder  
Portland, Oregon 97204  
Telephone 503/248-9507

Dept. of Environmental Quality

RECEIVED  
FEB 3 1984

beak

January 31, 1984

NORTHWEST REGION

Mr. James A. Broad  
Department of Environmental Quality  
522 South West Fifth Avenue  
Post Office Box 1760  
Portland, Oregon 97204

Re: BEAK Project D2993 - Avison Lumber Company  
Monitoring Program

Dear Mr. Broad:

Sampling continued during January, 1984 to monitor chlorophenol concentrations in Bear Creek near the Avison mill in Molalla, Oregon. Two samples were collected for analysis on January 16, 1984. Stations sampled (SW1, SW2) were identical to those sampled during December, 1983. Results of sample analysis are presented in Table 1 along with the results for December. I will continue to present sample analysis results in this cumulative format to facilitate comparisons between months and to illustrate any trends in chlorophenol concentrations over time. The discharge for Bear Creek is also presented in Table 1.

A marked decrease in the concentrations of both 2,3,4,6-Tetrachlorophenol and Pentachlorophenol was noted for the January samples. Three of the four values reported were less than the 0.0032 mg/l specified by the Department in its letter to Avison Lumber Company. This was undoubtedly due, in part, to the low discharge rate in Bear Creek at the time the samples were collected. However, it may also be due to a general trend towards decreasing values as a result of the updated facilities now in operation at the mill. Additional data should clarify this subject.

Should you have any questions or comments, please give me a call at 248-9507.

Sincerely,



Donald R. Anglin  
Fish and Wildlife Biologist  
BEAK CONSULTANTS INCORPORATED

DRA/kh

cc: Bill Avison

Table 1. Chlorophenol analysis results by date for stations SW1 and SW2 on Bear Creek near the Avison mill in Molalla, Oregon.

Date	2,3,4,6 Tetrachlorophenol (mg/l)	Pentachlorophenol (mg/l)	Bear Creek Discharge (mgd)
12/14/83			
SW1	0.01130	0.00494	18.0
SW2	0.01730	0.00473	
1/16/84			
SW1	0.00530	0.00276	5.5
SW2	0.00306	0.00162	



STATE OF OREGON

INTEROFFICE MEMO

TO: File

DATE: November 23, 1983

FROM: BHW

SUBJECT: WQ - Avison Lumber Company  
File No. 32544  
Clackamas County

On November 23, 1983, I called Gordon Haver of Avison Lumber and requested that he start sampling Bear Creek once a month for pentachlorophenol, as has been requested by letter. He said he would.

/emc





POTENTIAL HAZARDOUS WASTE SITE  
DISPOSITION

REGION SITE NUMBER

010

ORD0069045261

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME

Avison Lumber Co.

B. STREET

Fifth and Lola St.

C. CITY

Molalla

D. STATE

OR

E. ZIP CODE

97038

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY			
		EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED -- NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED (If yes, complete Section III.)		X	X		
C. REMEDIAL ACTION NEEDED (If yes, complete Section IV.)					
D. ENFORCEMENT ACTION NEEDED (If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)					

E. RATIONALE FOR DISPOSITION / SOURCES OF INFORMATION

Based on information in DEQ files, EPA/DOO file and Bear consultants chlorophenol reports, much has been done at this site. Problems include sloppy practices concerning PCB, TCP.

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION (mo., day, & yr.)

G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED (mo., day, & yr.)

H. PREPARER INFORMATION

1. NAME

Tom Robertson

2. TELEPHONE NUMBER

8-423-7024

3. DATE (mo., day, & yr.)

12/30/87

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

Low priority site inspection based on the fact that much work has already been done at this site. Original source of contamination has been removed. A S.I. should concentrate on groundwater of on-site wells (existing wells).

B. PROPOSED INVESTIGATIVE ACTIVITY (Detailed Information)

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION (mo., day, & yr.)	3. TO BE PERFORMED BY (EPA, Contractor, State, etc.)	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION				
(1) _____				
(2) _____				
(3) _____				
b. TYPE OF MONITORING				
(1) _____				
(2) _____				
c. TYPE OF SAMPLING				
(1) _____				
(2) _____				



REGIONAL CODE MAINTENANCE FORM

☐ CHANGE

☐ ADD

☐ DELETE

DATE 12/28/87

ID #

009045261

Aulson Lumber

Add:

HT30

HT50

HT60

ORCI - 3/1983

OIBA

ORST - 2/1984

HCSO

HTCP

HTWP

HTPP

HTIP

HT20

HT10

HT00

HPSL

HCMA

HCOA

HTAP

OSAZ

OSAS

OGTR 5S 2E Sections 8, 16 & 17.